

# The Opposition to Alternative Energy Progress: Why It Feels Like Running against the Wind

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## *Introduction*

The development of wind energy projects in the United States has attracted great interest over the past decade,<sup>1</sup> and the federal government appears to recognize the benefits of wind power, as is seen by various tax credits and loan guarantees made available for the industry.<sup>2</sup> This interest has not been without its setbacks however, proposed projects to develop wind energy facilities have faced years of regulatory hurdles and private litigation.<sup>3</sup> As a prime example, the Cape Wind project has largely been viewed as a test case for offshore wind energy projects in the United States.<sup>4</sup> The complex and changing regulatory scheme, in addition to the cost and delay associated with private litigation from citizen groups challenging every step of the approval process, will likely discourage future development of wind energy projects in the United States without reform.<sup>5</sup> There has also been opposition to existing wind farms that has served to set back further attempts to bring large-scale wind farms to fruition, both on and

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<sup>1</sup> Katherine A. Roek, *Offshore Wind Energy in the United States: A Legal and Policy Patchwork*, 25 NAT. RESOURCES & ENV'T 24, 24 (2011) ("Interest [in] developing offshore wind in the United States has increased dramatically over the past few years.").

<sup>2</sup> Erica Schroeder, Comment, *Turning Offshore Wind On*, 98 CAL. L. REV. 1631, 1631–32 (2010) ("The federal government appears to recognize the opportunities and benefits that wind power offers. In February 2009, Congress positioned wind power generation to continue its rapid growth by renewing production tax credits for wind power projects through 2012. Congress also gave the wind industry options for investment tax credits or U.S. Treasury Department grants for certain wind power projects placed in service by 2012. In addition, in July 2009, DOE announced up to \$ 30 billion in loan guarantees for renewable energy projects, including wind power.")

<sup>3</sup> Ashlyn N. Mausolf, Note, *Clearing the Regulatory Hurdles and Promoting Offshore Wind Development in Michigan*, 89 U. DET. MERCY L. REV. 223 (2012).

<sup>4</sup> Tom Moroney & Jim Efstathiou Jr., *Obama Wind Farm Goals Threatened by Indian Rites, Kennedy's Parting Wish*, BLOOMBERG (Apr. 14, 2010 9:00 PM), available at <http://www.bloomberg.com/apps/news?pid=20601130&sid=aYGGAST8uKmc> ("Everyone is waiting for Cape Wind to break the ice. There would be few investors willing to put themselves at risk if it didn't look like the U.S. was committed to renewable offshore energy.").

<sup>5</sup> Timothy H. Powell, Note, *Revisiting Federalism Concerns in the Offshore Wind Energy Industry In Light of Continued Local Opposition to the Cape Wind Project*, 92 B.U. L. REV. 2023 (2012).

offshore.<sup>6</sup> This opposition has come from sources all over the political and social spectrum, from government agencies to environmental groups, agricultural farms to shipping and fishing industries, and local landowners with property and health concerns to Native American communities with historic and customary concerns.<sup>7</sup>

### *Government Agency Complaints*

Both the Department of Defense (DoD) and the Federal Aviation Administration (FAA) have lodged complaints against wind farm developments.<sup>8</sup> Their concerns stem largely from the fact that they continue to use outdated radar systems.<sup>9</sup> Wind turbines are capable of causing radar interference on these dated systems, and can appear as airborne objects on radar detection systems.<sup>10</sup> Radar interference problems such as these have been raised at the last minute in certain proposed developments and have caused expensive delays and poorly planned mitigation efforts by developers.<sup>11</sup> Because of the substandard mitigation efforts, both the DoD and FAA have been working to develop and implement stronger radar technology and to develop guidelines for best mitigation practices for wind farms and their developers.<sup>12</sup> The biggest problem for implementing new radar systems, however, is the economic downturn and ensuing government shutdowns, which make such systems a very low priority for government.

### *Environmental Group Opposition*

While it may seem counterintuitive that environmental groups would oppose wind farm development, an emission-free energy production process, the complaints lodged have typically

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<sup>6</sup> *Id.*

<sup>7</sup> *Id.*

<sup>8</sup> See Leora Vestel, *Wind Turbines Projects Run into Resistance*, N.Y. TIMES (Aug. 26, 2010), available at <http://www.nytimes.com/2010/08/27/business/energy-environment/27radar.html>.

<sup>9</sup> *Id.*

<sup>10</sup> *Id.*

<sup>11</sup> Lisa Daniel, *Officials Work to Resolve Wind Energy, Radar Dilemma*, AM. FORCES PRESS SERV. (July 2, 2010), available at <http://www.defense.gov/news/newsarticle.aspx?id=59879>.

<sup>12</sup> *Id.*

been driven by the fact that wind turbines cause species mortality, and are often sited in rural areas that offer much-needed species habitat.<sup>13</sup> Environmental groups have sued developers under the Endangered Species Act, Migratory Bird Treaty Act, and other environmental protection statutes, in hopes of seeking an injunction against the wind farm construction and operations.<sup>14</sup> Environmental plaintiffs were successful in West Virginia in halting the operations of a wind farm in an area that is home to endangered Indiana bats under the Endangered Species Act.<sup>15</sup> This injunction prevented any new turbines from being approved or constructed for the project until the developer underwent the Incidental Take Permitting process through the Fish and Wildlife Service.<sup>16</sup> In 2007, the Coastal Habitat Alliance sued a Texas wind developer seeking an injunction to stop construction on a wind project adjacent to the Laguna Madre, an environmentally sensitive bay in the Gulf of Mexico.<sup>17</sup> The two most noteworthy cases of environmental opposition to wind farming are the previously mentioned Cape Wind Project and the Altamont Pass, the details of which vary significantly, such as siting, technology, and timing, but the outcomes and processes are quite similar.

### *Farming Opposition & Wildlife Kills*

Existing agricultural farms may make highly suitable sites for wind farms. Dr. Sterling Burnett, however, claims that such sites may not be suitable because turbines can dry out the soil beneath them.<sup>18</sup> Burnett also claims that regular wind-tower maintenance requires miles of paved roads, which increases negative environmental impact, such as runoff and reduction of soil

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<sup>13</sup> Veery Maxwell, Article, *Wind Energy Development: Can Wind Power Overcome Substantial Hurdles to Reach the Grid*, 18 HASTINGS W.-N.W. J. ENV. L. & POL'Y 323 (2012).

<sup>14</sup> See *Animal Welfare Inst. v. Beech Ridge Energy LLC*, 675 F. Supp. 2d 540 (D. Md. 2009).

<sup>15</sup> *Id.* at 580.

<sup>16</sup> *Id.* at 579–580.

<sup>17</sup> *Coastal Habitat Alliance v. Patterson*, 601 F. Supp. 2d 868, 870 (W.D. Tex. 2008).

<sup>18</sup> Telephone Interview with H. Sterling Burnett, Ph.D., Senior Fellow, National Center for Policy Analysis (March 26, 2007).

moisture absorption.<sup>19</sup> He asserts, “The damage to wildlife habitat is often greater than that from technologies associated with conventional fossil fuels.”<sup>20</sup> Opposition to wind farms also comes from those concerned with the deaths of thousands of birds and bats that are killed each year by wind-turbine blades.<sup>21</sup> Due to avian mortality recorded at Altamont Pass, the wind industry has had to work for many years in public image damage control to assuage the negative sentiment associated with large-scale wind energy production. For this reason, Altamont Pass is the cause of the enduring perception of a conflict between environmentalists and wind energy proponents.<sup>22</sup> Wind farms must be located where the wind blows constantly.<sup>23</sup> These locations are typically prime travel routes for migratory birds, including protected species like bald and golden eagles.<sup>24</sup> At the Altamont Pass wind farm in California, “At least 22,000 birds, including some 400 golden eagles, have collided with wind turbines, or been electrocuted by power lines there.”<sup>25</sup> Commenting on the deaths at Altamont Pass, Burnett writes, “The bird death issue is complicated by the fact that commercially viable wind farms must be situated in areas where the wind blows as frequently and steadily as possible. These locations tend also to be major flyways for raptors and migratory birds.”<sup>26</sup> Quoting the facts presented by the Audubon Society from a suit that settled in 2007, Burnett states, “among the birds deaths are between 456 and 1,129

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<sup>19</sup> *Id.*

<sup>20</sup> H. Sterling Burnett, *Wind Power: Red Not Green*, NAT’L CTR. FOR POL’Y ANALYSIS, (Feb. 23, 2004) available at <http://www.ncpa.org/pdfs/ba467.pdf>. Roads might be gravel roads, as opposed to paved roads.

<sup>21</sup> See Randy LoBasso, *How Wind Energy Is Sucking the Life Out of Our Bat Population*, PHILADELPHIA WEEKLY (May 23, 2012), available at <http://www.philadelphiaweekly.com/news-and-opinion/152702125.html>.

<sup>22</sup> *Fact Sheet on Altamont Pass Bird Kills*, CTR. FOR BIOLOGICAL DIVERSITY, [http://www.biologicaldiversity.org/campaigns/protecting\\_birds\\_of\\_preym\\_at\\_altamont\\_pass/pdfs/factsheet.pdf](http://www.biologicaldiversity.org/campaigns/protecting_birds_of_preym_at_altamont_pass/pdfs/factsheet.pdf) (last visited Jan. 6, 2014).

<sup>23</sup> Burnett, *supra* note 20.

<sup>24</sup> *Id.*

<sup>25</sup> Frances Cerra Whittelsey, *The Birds and the Breeze: Making wind power safe for wildlife*, SIERRA MAG., (Feb. 2007) available at <http://www.sierraclub.org/sierra/200701/birds.asp>.

<sup>26</sup> H. Sterling Burnett, *Altamont Pass Settlement Fails to Reduce Bird Kills*, HEARTLANDER MAG., (March 1, 2008) available at <http://news.heartland.org/newspaper-article/2008/03/01/altamont-pass-settlement-fails-reduce-bird-kills> [hereinafter Burnett, *Altamont Pass Settlement*].

raptors killed each year, including 75 to 116 golden eagles killed annually.<sup>27</sup> The deaths at Altamont Pass seem to be a slightly skewed statistical representation, a perfect storm of conditions leading to bird deaths, but they also present a good indication of the difficulty of properly siting a wind farm.

### *Fishing and Shipping Industries*

Siting considerations must also consider the shipping and commercial fishing industries. Offshore wind development can potentially affect commercial fishing by limiting the available waters for fishing or by disrupting or influencing commercial fish stock.<sup>28</sup> Commercial fishermen have contested that, depending on the spacing between the turbines, it may not be possible for their boats, using certain types of fishing tackle, to operate safely within the bounds of the farm.<sup>29</sup> The submarine cables that connect the farm to the grid can also affect continued ability to operate a trawling type of fishing operation within the vicinity of the farm.<sup>30</sup> Fish stocks may also be affected by disruptions of habitat during construction.<sup>31</sup> It is likely that in addition to disturbing existing habitats, new invertebrate reef communities develop on the bases of turbines that may support commercial fishing for particular species, but could also be detrimental if non-commercial competitors exploit these artificial reefs.<sup>32</sup>

### *Local Landowners with Property and Health Concerns*

One of the greatest barriers to entry for wind energy development is hostility from locals with a “not in my backyard” (NIMBY) approach because, while the general public is supportive

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<sup>27</sup> *Id.*

<sup>28</sup> Robert W. Eberhardt, *Federalism and the Siting of Offshore Wind Energy Facilities*, 14 N.Y.U. ENVTL. L.J. 374 (2006).

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> See Elizabeth A. Ransom, *Wind Power Development on the United States Outer Continental Shelf: Balancing Efficient Development and Environmental Risks in the Shadow of the OCSLA*, 31 B.C. ENVTL. AFF. L. REV. 465, 470–72 (2004).

<sup>32</sup> *Id.*

of wind energy in theory as an alternative energy supply, very few people are interested in having large turbines in their neighborhood.<sup>33</sup> Local citizens have often tried to block wind farms by claiming that they are aesthetically unappealing, too noisy, and that they create odd flutter shadows.<sup>34</sup> The complaints have halted, delayed, or limited proposed projects.<sup>35</sup> Because the projects are often built in relatively rural areas, the largest complaint about wind farms from locals has to do with siting, where the industrial aesthetic of the turbines stands in stark contrast with the pastoral qualities of the landscapes they seek to occupy. According to siting expert Robert Kahn, “Americans put a high value on wilderness and open space. Sparks fly when lands seen as public viewsapes (even if they are not publicly owned) appear threatened. Unfortunately, these lands are where developable renewable resources are to be found.”<sup>36</sup> Wind power is often most readily harnessed in large open areas that tend to overlap in purpose with scenic areas and parklands and, as a result, in order to mitigate the negative aesthetic impacts of their projects, some developers have gone so far as to hire artists to lessen the industrial look of their turbines.<sup>37</sup> William Koch, whose better-known brothers often underwrite conservative political causes, has been successfully tying up progress of the Cape Wind project for years.<sup>38</sup> Koch has been buying property along the coast that would have a prime view of the turbines, should they be built.<sup>39</sup> He claims that the turbines would have a very negative aesthetic impact on his and surrounding properties, but some have speculated that, because his fortune was made

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<sup>33</sup> See Tom Zeller Jr., *Noisy Wind Turbines Attract Complaints*, N.Y. TIMES (Oct. 5, 2010), available at [http://www.nytimes.com/2010/10/06/business/energy-environment/06noise.html?\\_r=1](http://www.nytimes.com/2010/10/06/business/energy-environment/06noise.html?_r=1).

<sup>34</sup> *Id.*

<sup>35</sup> See *Town of Barnstable v. Cape Wind Assocs., LLC*, 27 Mass L. Rptr. 111 (Mass. Super. Ct. 2010).

<sup>36</sup> Joe Romm, *Graham, Kerry, Lieberman Share Details of Bipartisan Climate and Clean Energy Jobs Bill with Industry Groups*, CLIMATE PROGRESS (March 17, 2010), available at <http://climateprogress.org/2010/03/17/graham-kerry-lieberman-share-details-of-bipartisan-climate-and-clean-energy-jobs-bill-with-industry-groups/>.

<sup>37</sup> See Adrian Pearson, *Artist Working on Turning Wind Turbines into Works of Art*, JOURNALLIVE (Dec. 16, 2008), available at <http://www.journallive.co.uk/north-eastnews/todays-news/2008/12/16/artist-working-on-turning-wind-turbine-into-works-of-art-61634-22483669/>.

<sup>38</sup> Katherine Q. Seelye, *Koch Brother Wages 12-Year Fight Over Wind Farm*, N.Y. TIMES (Oct. 22, 2013), available at [http://www.nytimes.com/2013/10/23/us/koch-brother-wages-12-year-fight-over-wind-farm.html?\\_r=1&](http://www.nytimes.com/2013/10/23/us/koch-brother-wages-12-year-fight-over-wind-farm.html?_r=1&)

<sup>39</sup> *Id.*

in fossil fuels, he has other reasons for blocking progress of alternative energy projects, especially in his backyard.<sup>40</sup>

In addition to aesthetic concerns, there is an issue concerning the negative impact of wind turbines on human health in closely adjacent areas.<sup>41</sup> In her article on the health impacts relating to wind farms, Dr. Sarah Taylor states, “Wind turbines are known to cause a number of effects that have an impact on health: . . . noise and shadow flicker that are sources of annoyance, sleep disturbance and symptoms of stress in some people.”<sup>42</sup> It is important to clarify that annoyance is defined as an actual medical condition that “is recognized as a critical health effect”<sup>43</sup> and not just as it is commonly known. Dr. Taylor goes on to say that it is not just the low frequency noise from the turbines that is associated with symptoms of headache, irritability, difficulty concentrating, fatigue, dizziness, anxiety, and sleep disturbance, but also the waffling effect created by the “audible modulation of the aerodynamic noise, especially at night.”<sup>44</sup> It is from this that local citizens with a “not in my backyard” approach come to view their health risks, along with aesthetic discomforts, as valid reasons for fighting existing and proposed wind farm development. Native American communities have a similar approach but seat their concerns more deeply, from a historic and customary viewpoint; they express their dissatisfactions, claiming that wind development is inapposite with their very view of life.

#### *Native American Communities with Historic and Customary Concerns*

Wind plays a crucial role in Native American spirituality and cultural values as an essential part of the environment and that humankind is a part of, not separate from, this

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<sup>40</sup> *Id.*

<sup>41</sup> Richard Cockle, *Wind Whips up Health Fears*, OREGONIAN (Aug. 10, 2008), available at <http://www.oregonlive.com/news/oregonian/index.ssf?/base/news/1218250522129010.xml>.

<sup>42</sup> Sarah Taylor, *Report on the Health Impacts of Wind Farms Shetland 2013*, NHS SHETLAND (2013), available at [http://s3.amazonaws.com/windaction/attachments/1935/Report\\_on\\_Health\\_Impacts\\_Wind\\_Farms.pdf](http://s3.amazonaws.com/windaction/attachments/1935/Report_on_Health_Impacts_Wind_Farms.pdf).

<sup>43</sup> *Id.*

<sup>44</sup> *Id.*

environment.<sup>45</sup> Current estimates show that the federal government, for wind energy development, targets more than 50 percent of Native American tribal land.<sup>46</sup> Some opposition claims stem from the fact that people assume that because wind energy is seen as an environmentally friendly technology it somehow must comport with Native American culture, but this is logically flawed, and leads to complaints of environmental racism.<sup>47</sup> This stereotyping may predetermine the acceptability of this technology by Native Americans before fully engaging them, consequently not allowing them to determine whether such technology is compatible with their spiritual, cultural, and environmental values.<sup>48</sup> Environmental justice<sup>49</sup> would suggest that more attention should be devoted to the problems of leaving tribes with unproven technologies, a lack of subsidies to sustain their investment, and lost investments that become worthless, should they decide to allow wind farming on their lands.<sup>50</sup>

### *Conclusion*

While the opposition to wind farming has been able to set back efforts in the development process, the federal government maintains strong incentives through subsidies and a progressive agenda for the continued diversification of energy production. Whether the opposition to wind-farming will be successful in its attempts to thwart such progress as an

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<sup>45</sup> Victoria Sutton, *Wind and Wisdom*, 1 ENVTL. & ENERGY L. & POL'Y J. 346 (2007).

<sup>46</sup> *Wind Energy Program Multi Year Technical Plan for 2004-2010*, DEPT. OF ENERGY 23 (2003), available at [http://manhaz.cyf.gov.pl/manhaz/links/US\\_DOE\\_energy\\_efficiency+renewable\\_technologies/mytp\\_nov\\_2003.pdf](http://manhaz.cyf.gov.pl/manhaz/links/US_DOE_energy_efficiency+renewable_technologies/mytp_nov_2003.pdf).

<sup>47</sup> Environmental racism is defined in two ways. It can be "racial discrimination in environmental policy making and the unequal enforcement of environmental laws and regulations. . . the deliberate targeting of people of color communities for toxic waste facilities and the official sanctioning of life-threatening presence of poisons and pollutants in people of color communities." Michael Fisher, *Environmental Racism Claims Brought Under Title VI of the Civil Rights Act*, 25 ENVTL. L. 285, 289 (1995). Alternatively, it is "any policy, practice, or directive that, intentionally or unintentionally, differentially impacts or disadvantages individuals, groups, or communities based on race or color; as well as the exclusionary and restrictive practices that limit participation by people of color in decision-making boards, commissions, and staffs." *Id.* at 289-90.

<sup>48</sup> See Sutton, *supra* note 45, at 347.

<sup>49</sup> "Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." See *Environmental Justice*, ENVTL. PROT. AGENCY, <http://www.epa.gov/environmentaljustice/index.html> (last updated Nov. 19, 2013).

<sup>50</sup> See Sutton, *supra* note 45, at 347.

alternative means to domestic energy production remains to be seen, but it is clear that neither side will prevail without an understanding of the concerns presented by the other. As with all forms of energy production, it must be decided how much damage to various interests of citizen groups, governmental agencies and environmental organizations is acceptable as collateral damage in an effort to clean up and diversify energy production in the United States. The potential harm must be weighed against the utility of doing so, while being ever mindful of the potential risks of inaction.